

Aromatic Imide and Aromatic Methylidynetrissulfonyl Compounds and Method of Making

Abstract

5 A method is provided for making aromatic-imide and aromatic-methylidynetrissulfonyl species by reaction of aromatic species with a reactant according to formula (I):



wherein Q is C or N; wherein each X is independently selected from the group
10 consisting of halogens, typically F or Cl; wherein each R_1 is independently selected from the group consisting of aliphatic and aromatic groups, which may or may not be saturated, unsaturated, straight-chain, branched, cyclic, heteroatomic, polymeric, halogenated, fluorinated or substituted; wherein m is greater than 0; wherein $m + n = 2$ when Q is N; and wherein $m + n = 3$ when Q is C. Ar may be derived from an aromatic
15 polymeric compound. In addition, compounds are provided according to the formula: $(Ar-SO_2-)_{m}-QH-(-SO_2-R_1)_n$ wherein R_1 comprises a highly acidic group selected from sulfonic acid, carboxylic acid and phosphonic acid, and Ar is derived from an aromatic compound.

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